

**GOVERNMENT OF INDIA
NON-CONVENTIONAL ENERGY SOURCES
LOK SABHA**

UNSTARRED QUESTION NO:4404
ANSWERED ON:18.12.2000
DEVELOPMENT OF MULTIPURPOSE TECHNOLOGY
THAAWAR CHAND GEHLOT

Will the Minister of NON-CONVENTIONAL ENERGY SOURCES be pleased to state:

- (a) whether the Renewable Energy Development Agency has developed solar cooker which can operate in harsh winters in Kargil Hills;
- (b) if so, the details thereof;
- (c) whether a lamp has also been developed using same technique;
- (d) whether similar technology has been innovated in any other country of the world;
- (e) if so, the details thereof;
- (f) the sectors in which the Government propose to utilize this multipurpose technology; and
- (g) the details of the scheme if any, formulated by the Government in this regard?

Answer

MINISTER OF STATE FOR NON-CONVENTIONAL ENERGY SOURCES (INDEPENDENT CHARGE) (SHRIM. KANNAPPAN)

(a)&(b): The Ministry of Non-Conventional Energy Sources has been supporting the development and use of solar energy devices in the country for a variety of purposes . Following the Kargil conflict in 1999-2000, the Indian Renewable Energy Development Agency (IREDA), a financial institution under the Ministry, donated six solar cookers and 10 solar lanterns for use by an Army Unit stationed in Kargil. The solar cookers were specially designed to function in the high altitude and extremely cold conditions prevailing in the Kargil hills. Among the features incorporated in the cooker are:

- (i) the cooker box is made from light-stabilised polyester resin re-inforced with fiber glass;
- (ii) extra thick high density insulation has been provided;
- (iii) special rubber and silicone sealants have been used to withstand the low temperatures;
- (iv) the cover glass plates are made of toughened glass.

(c): The lantern supplied to Kargil also uses solar energy. The electronics used in the lantern unit have been specially designed to withstand low temperatures.

(d) & (e): Both solar cooking and solar lighting are well-known and established concepts. Different designs of solar cookers and solar lighting systems have been developed and are in commercial production in several countries including USA, Germany, Japan, China, South Africa and Switzerland. These products are usually adapted to suit local conditions and requirements.

(f)&(g): Solar cookers, solar lanterns and other lighting systems are already in commercial production in the country. Several lakhs of these systems have been supplied under the solar energy programmes of the Ministry in various parts of the country. The Ministry is implementing well-formulated schemes for this purpose. The Photovoltaic Programme of the Ministry provides for subsidy to users of lighting systems and is implemented through the renewable energy agencies in various States. The Ministry also supports promotional activities such as publicity, training and demonstration in respect of solar cookers.